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### ABSTRACT

Methods and apparatus for generating and processing wideband signals having reduced discrete power spectral density (PSD) components are disclosed. A wideband signal having reduced discrete PSD components is achieved by generating data symbols responsive to data for transmission, transforming one or more of the data symbols into a frame including one or more orthogonal frequency division multiplexing (OFDM) symbols, selectively inverting the frame responsive to a pseudo-random data sequence, and modulating wideband signal pulses of the wideband signal with the selectively inverted frame.